

HIGH EFFICACY METAL HALIDE LAMP WITH CONFIGURED DISCHARGE CHAMBER

ABSTRACT OF THE DISCLOSURE

An arc discharge metal halide lamp for use in selected lighting fixtures comprising a discharge chamber having light permeable walls of a selected shape including therein a pair of end region wall portions through each of which a corresponding one of a pair of electrodes are supported separated from one another by a separation length. The ratio of the separation length to the effective operation inner diameter of the chamber is greater than two. The lengths of the wall sides between the end wall portions is greater than the effective operation inner diameter. The end wall portions have inner surfaces of constant or smaller varying radii of curvature and they are separated from the interior ends of the electrodes by more than one millimeter. The discharge chamber can be constructed of polycrystalline alumina and contain metal halides.